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BRETT CARLSON INTELLECTUAL PROPERTY
SNELL AND WILMER
ONE ARIZONA CENTER
400 EAST VAN BUREN
PHOENIX, AZ 85004-2202

EXAMINER	
ZURITA, JAMES H	
ART UNIT	**PAPER NUMBER**
3625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/241,188	Applicant(s) BLANDINA ET AL.	
	Examiner James Zurita	Art Unit 3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-23 and 25-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-23, 25-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10 April 2003 has been entered.

Response to Amendment

In their amendment of 10 April 2003, applicants amended claims 20, 28 and 29. Claims 20-23 and 25-35, a total of fifteen claims, remain and will be examined.

Response to Arguments

Applicant's arguments filed 10 April 2003 have been fully considered but they are not persuasive.

Applicants present arguments against Schien and Owens individually. In response to applicants' arguments against the references individually, the Examiner again respectfully notes that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Schein discloses applicants' invention but *does not* address issues of object-oriented analysis and design. Owens was first introduced in parent application 09/105406(now abandoned). Owens was re-introduced in the present application to address applicants' concern over the absence of the word *object* in Schein. Owens is used to show that object-oriented paradigms and their application to database technologies are (a) old and well *known*, (b) may be used in many types of computer applications and software design, and (c) may be used particularly with financial products such as claimed by applicants. For purposes of definitions, object technology is the use of objects as building blocks for applications.[1] An object is a self-contained module of data and its associated processing.[2] Applicants have neither argued nor shown that their use of object-related terminology (e.g., *object, object-oriented analysis, object-oriented design, etc.)* differs from the terms' widely accepted use.

A "traverse" is a denial of an opposing party's allegations of fact.[3] The Examiner respectfully submits that applicants' arguments and comments do not appear to traverse what Examiner regards as knowledge that would have been generally available to one of ordinary skill in the art at the time the invention was made. Even if one were to interpret applicants' arguments and comments as constituting a traverse, applicants' arguments and comments do not appear to constitute an adequate traverse because applicant has not specifically pointed out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-

[1] The Computer Desktop Encyclopedia, Alan Freedman, copyright 1996.

known in the art. 27 CFR 1.104(d)(2), MPEP 707.07(a). An adequate traverse must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying Examiner's notice of what is well known to one of ordinary skill in the art. In re Boon, 439 F.2d 724, 728, 169 USPQ 231, 234 (CCPA1971).

For example, applicants have not shown or argued that one of ordinary skill would *not* have known that (a) VISA, CITIBANK *client system,* MERRILL LYNCH (a brokerage firm with *clients*) offer a plurality of financial products and (b) various other financial institutions, networks and participants of those networks may use Shein's disclosures, as in Col. 22, lines 4-16. Concerning Owens, applicants have not shown or presented arguments or information to create reasonable doubt that one of ordinary skill in the art would not have known that object-oriented paradigms and their application to database technologies (a) are old and well known, (b) may be used in many types of computer applications and software design, and (c) may be used particularly with financial products such as claimed by applicants.

Concerning Schein, applicants argue that

> The Schein reference describes a communication and messaging & network for use by a bank (see, e.g., Abstract and cot. 9, lines 1-13). The Schein system merely allows customers and bankers to access their various personal banking records (including checking and savings accounts, investment accounts, mortgages and the like) from remote locations (such as branch offices or from home) via telephone, personal computer, etc. (see, e.g., col. 10, lines 14-27). Schein in no way creates, administers or facilitates multiple stored value products (e.g. smartcard programs). Amdt D, page 5.

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[2] The Computer Desktop Encyclopedia, Alan Freedman, copyright 1996.
[3] Definition of Traverse, Black's Law Dictionary, "In common law pleading, a traverse signifies a denial."

As noted in the previous Office Action, Schein discloses that the system may add (i.e., create) relationships and records between users and clients based upon other criteria in the future (see at least Col. 17, line 37-Col. 18, line 8.). The Examiner respectfully submits that Applicants have not shown that their use of the term "add" or "create" varies from the terms' common, ordinary meanings.

Schein discloses that one or more financial service providers (applicant's multiple clients, such as banks) offer additional products or services and that customers may open accounts (see at least 4, lines 23-44). Several of these relationships may be found in Fig. 7 and related text, Col. 17, line 37-Col 18, line 58). Schein also discloses that database management systems create databases and structures and provides means for the control and administration of the data in the database (see at least Col. 6, line 53-Col. 7, line 47).

Schein refers to *data models* that reflect the structure of a customer's relationship to a bank (Col. 3, line 65-Col. 4, line 12). Schein discloses that a bank is only one example of a financial institution as a client system (see discussion of financial institutions, below).

Applicants admit "...Schein discloses ...banking services ...[including] smart cards." The Examiner respectfully submits that Applicants have not argued or shown that their use of the terms "smart card" "bank" "stored value product" varies from the common ordinary meaning of the terms, and as found in Schein.

The Examiner respectfully submits that a network is a group of computers and associated devices that are connected by communication facilities.[4] The Examiner respectfully submits that a client is a computer that accesses shared network resources provided by another computer.[5] Applicants admit that Schien discloses a network and clients:

> The Schein reference describes a communication and messaging ***network*** for use by a bank (see, e.g., Abstract and cot. 9, lines 1-13). The Schein system ... allows customers and bankers to ***access*** their various personal banking records (including checking and savings accounts, investment accounts, mortgages and the like) from ***remote locations*** (such as branch offices or from home) ***via telephone, personal computer,*** etc. (Amdt D, page 5, emphasis added)

The Examiner respectfully submits that applicants have not argued or shown that their use of the terms "network" "client" varies from the common ordinary meaning of the term, except to state that Schein (emphasis added)

- ... makes no mention, however, of the *complicated systems and methods* of stored value products, capturing transaction data, or routing transaction data which are part of the presently [newly amended claims] claimed invention...
- ...functionality is not the same as *complex database* of objects associated with stored value products as recited in the [newly amended] pending claims....
- Furthermore, while the list of banking services merely includes the term smart cards, no mention whatsoever is made of "client systems associated with at least one of the plurality of stored value products" (emphasis added) as recited in the [newly amended] pending claims and as described in the present Specification.

Concerning Owens, applicants state

(a) Owens disclosure is far removed from the field of the present invention.
(b) Owens deals specifically with a program (such as an online wallet) that could be used by Internet consumers to purchase goods or track funds using various bank accounts.
(c) The reference in no way deals with the complex methods and systems for creating, administering or facilitating stored value programs
(d) ...nor does it deal with an intricate back-end transaction processing system of any sort.

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[4] Definition of Network, MICROSOFT Computer Dictionary.
[5] Definition of Client, MICROSOFT Computer Dictionary.

The Examiner respectfully notes that applicants' arguments were raised and answered in previous Office Actions. Nevertheless, the Examiner will take this opportunity to further elaborate on the rejection and to further clarify the record, and so that applicants may more easily identify particular features of their invention that are unpatentable over Schein, Owens and knowledge generally available to those of ordinary skill in the art.

Owens is not removed from the field of applicants' invention. Owens' sample applications include phone services, internet access services, frequent flyer miles and others (see at least Col. 1, lines 42-63). Owens' examples are similar to Applicants' stored value products:

> Financial systems using *stored value* products are well-known in the art. An example of a *stored value* product is a pre-paid telephone card, which is typically a plastic or paper card with a unique identification code. The code may be printed on the front of the card, or it may be stored electronically on a magnetic stripe that is attached to the card. To access the value on the card, consumers may, for example, dial a pre-determined phone number and input the unique code, thereby identifying the card and allowing the consumer to access a service (such as long distance telephone service). Besides telephone services, magnetic stripe cards have been used to pre-pay for, among other things, gasoline or department store merchandise. In these industries, special card reading machines such as those found in many retail establishments (e.g. point of sale (POS) terminals) are typically configured to read the magnetic stripes incorporated onto the card. A relatively new *stored value* technology is the smartcard which typically replaces the magnetic stripe with a microprocessor. Other *stored value* products include, for example, ATM cards, at-home banking and many Internet commerce products. *Stored value* products have been suggested as a replacement for cash in many transactions because such products have been shown to be secure and convenient without compromising the privacy of the user. Consumers frequently purchase *stored value* cards for pre-determined amounts, or, alternatively, the card may be configured to hold an electronic representation of value that the consumer has purchased. (disclosures, page 1, line 12-page 2, line 12)

Owens discloses the use of relational databases (such as ORACLE, as claimed by applicants):

> Database server 116 generally retains information substantially within a database 142 that is preferably a relational or object oriented database. In a particularly preferred embodiment, database server 116 is an AS/400 computer running DB12 database server

> software available from the IBM Corporation of Armonk, New York. In other exemplary embodiments, database 142 is implemented using SQL Server (available from the Microsoft Corporation of Redmond, Washington), ORACLE Database Server (available from the Oracle Corporation of Redwood Shores, California) or ADAPTIVE Server (available from the Sybase Corporation of Emeryville, California) running on any form of computer hardware.(disclosures, page 17, line 16- page 18, line 3)

Owens combines client-server nomenclature, object-oriented terminology in a financial environment that includes various types of financial products from one or more clients and one or more client systems (see at least Col. 5, line 36-Col. 6, line 10). As noted above, Applicants have not argued or shown that their use of the terms "smart card" "bank" "stored value product" varies from the common ordinary meaning of the terms, and as found in Schein and Owens.

Moreover, even if one were to find that Owens is removed from the field of applicants' invention, it has been held that a prior art reference must either be in the field of applicants' endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

As previously noted, it is true that Owens *does not* use the term back-end or front-end. However, Owens also *does not* use the term *online wallet*, as applicants suggest. Owens discloses billing and transaction recording issues (see at least Col. 1, line 41 – Col. 28). The Examiner respectfully submits that financial transactions and billing do not exist in a vacuum. Owens functions are consistent with applicants' references to billing as a back-end or back office functions. For example:

- ...functions that are commonly implemented on each administration system include, among others: adding new cards, enrolling customers in new accounts, issuing personal identification numbers (PINs), adding value to smartcards and other accounts, handling

transactions (merchant. ATM, telephone, etc.), and generating reports (such as billing statements and letters to consumers). An example of such a prior art prepaid card system is disclosed in U.S. Patent No. 5,577,109 issued on November 19, 1996 to Stimson et al., which is incorporated herein by reference. Similarly, a system for supporting multiple functionality on a single card is disclosed in U.S. Patent No. 5,574,269 issued on November 12, 1996 to Mori et al., which is incorporated herein by reference. (Disclosures, page 3, lines 4-14)

- Server 116 preferably supports two modes of interacting with clients 138. The first mode of system 20 (shown by clients 138A, 138B and 138C in Figure 2A) is typically referred to as a "centralized back end" or "centralized back office" because the client 138 merely acts as a "front end" (i.e. interface) for database server 116 which primarily handles data management functions. In embodiments wherein client 138 is a business entity, representatives of the client business entity provide information to database server 116 electronically, through online CSR input, or other means. Disclosures, page 8, lines 9-16).

Applicants' argue that Owens deals with programs that could be used by Internet customers to purchase goods or track funds using various bank accounts. As noted previously, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Applicants argue that there is no motivation or suggestion to combine Schein and Owens without impermissibly using applicants' claims as a guide. Again, the examiner respectfully recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves ***or*** *in the knowledge generally available to one of ordinary skill in the art.*

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In response to applicant's argument that the references fail to show certain features of applicant's invention, the Examiner respectfully notes that the features upon which applicant relies (i.e., complication and complexity of a database, intricate backend transaction processing system) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20, 28, 29 and claims dependent thereon are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims refer to "key object classes" "secondary object classes" and that the "key object classes" partition the database in accordance with high-level category. The term is indefinite because the specification does not clearly redefine the term, and applicants appear to use the term as synonyms.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled

in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "key" and "key object class" in claim 20, 28 and 29 are used by the claim to mean "a class of objects that contain keys", while the accepted meaning is "A key (key field) is an identifier for a record or group of records in a data file. In database design, an index is a list of keys (or keywords), each of which identifies a unique record. Indices make it faster to find specific records and to sort records by the index field, that is, the field used to identify each record.[6] A partition is a logically distinct portion of memory or a storage device that functions as though it were a physically separate unit; In database programming, a partition is a subset of a database table or file.[7]"

The terms "key", "key object class" "secondary object class" will be given their broadest reasonable interpretation to read on a field that serves as a reference to data, such as a customer identification number, that is used to reference customer data such as a customer's address, telephone number, etc. A secondary object class will be interpreted to read on data related to an additional classification of data in a database.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

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[6] Definition of Index, RANDOM HOUSE WEBSTER's Computer and Internet Dictionary.
[7] Definition of Partition, MICROSOFT Computer Dictionary.

> ***ordinary*** skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 20-23 and 25-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schein et al. U.S. Patent 6,226,623 (Schein) in view of Owens et al. (US Patent 6,047,267).

As noted above, "key", "key object class" "secondary object class" will be given their broadest reasonable interpretation to read on a field that serves as a reference to data, such as a customer identification number, that is used to reference customer data such as a customer's address, telephone number, etc. A secondary object class will be interpreted to read on data related to an additional classification of data in a database. Prior art will be interpreted to read on applicants' claims where prior art discloses one or more fields that organize data into categories. Prior art will be interpreted to read on the claims where prior art discloses the use of database fields to identify customers and customer relationships to providers of financial services.

As per claim 20, Schein discloses a system and methods for creating and facilitating a plurality of stored value products, the system comprising:

(a) a plurality of client systems each of said client systems being associated with at least one of the plurality of stored value products (Schein discloses that banks offer additional products or services and that customers may open accounts (i.e., Schein creates and facilitates plurality of financial products, including stored value products) see at least 4, lines 23-44). Schein describes a plurality of stored value products associated with a CITIBANK client system; Schein discloses that brokerage firms such as MERRILL LYNCH also participate in

offering financial products such as CITIBANK's; Schein discloses that VISA CORPORATION may also use their invention (see at least Col. 6, lines 6-67, Col. 21, lines 37-63) and that various other financial institutions and networks and participants of those networks may use their invention (Col. 22, lines 4-16).

(b) database facilitating the storage and retrieval of customer data, merchant data, and a plurality of data items (see at least, Col. 9, lines 42-47; see also references to centralized databases, Col. 10, lines 41-Col. 11, line 20);

(c) a transaction capture module configured to receive transaction data from a point-of-sale terminal configured to [receive] accept at least one of said plurality of stored value products (see at least, Col. 10, lines 41-56; Col. 20, lines 51-67; Col. 20, lines 51-67); and

(d) a *database server* configured to support [each of] said stored value products, to receive said transaction data from said transaction capture module, and to route said transaction data among said plurality of stored value products executing on said plurality of client systems; (see at least, Col. 9, line 62-Col. 10, line 7; see also at least references to multiple-user databases sharing of information and resources, Col. 7, lines 12-34; see references to location of various databases, including centralized data storage, and communication with various client systems that store and supply data to a centralized site, Col. 10, lines 41-56);

(e) wherein each of said stored value products comprises a plurality of data items retrieved from said database (see at least, Col. 7, lines 13-33, describing service

providers, financial institutions and their products, including stored-value products), and

(f) wherein each of said plurality of data items provides a function that is available to each of the plurality of stored value products [such that]; and wherein each of said plurality of stored value products is allowed to retrieve said customer data and said merchant data from said database using at least a portion of said plurality of objects (see at least, Col. 10, lines 41-56; see also at least references to profiles stored in a single repository, Col. 10, lines 28-Col. 11, line 48).

Schein discloses a report generating system in communication with said database server, wherein the report generating system is configured to assemble reports based at least in part upon said transaction data (see Col. 6, lines 53-65).

Schein discloses an authorization server in communication with the database server and the point-of-sale terminal and wherein the point-of-sale terminal is configured to query the authorization server for transaction approvals (see at least, Col. 2, lines 7-17; Col. 22, lines 4-24; Fig. 13, Fig. 2, items 28, 46; Col. 3, lines 53-63.

Schein discloses a plurality of data items comprising consumer information that is available to each of a plurality of stored value products (see at least, Col. 10, lines 41-56).

Schein discloses a server facilitating the operation of a plurality of stored value programs, each of said stored-value programs being associated with one of a plurality of client systems, the server comprising:

(a) a digital computer in communication with a database maintaining consumer information, merchant information and a plurality of data items (see at least, Col. 9, line 42-Col. 10, line 7);

(b) wherein each of said plurality of data items is configured to facilitate a particular function and to associate with each of said plurality of stored value programs (see at least, Col. 7, lines 13-33, describing service providers, financial institutions and their products), and

(c) wherein each of said plurality of stored value programs accesses said consumer information and said merchant information via at least one of said plurality of data items (see at least, Col. 10, lines 41-56);

(d) such that said consumer information and said merchant information is available to each of said plurality of financial products through a common interface available from the plurality of client systems. (see description of a common interface called a Global Integration Facility/GIF Col. 14, lines 36-51; see also references to client systems sending information to a centralized system, Col. 10, lines 28-65).

Schein discloses a method of facilitating financial transactions at a server, the method comprising the steps of:

(a) selecting a first plurality of objects from a repository of objects to form a first stored value program, said first stored value program corresponding to a first financial product and being associated with a first client system (see at least Col. 3, line 65-Col. 6, line 65 for description of the art related to forming a first stored value program and its corresponding financial product; Col. 4, lines 39-5Col. 11,

lines 11-48; Col. 12, lines 21-49 describing linking of various customer accounts and financial products; see also claim 20, above);

(b) selecting a second plurality of objects from said repository of objects to form a second stored value program, said second stored value program corresponding to a second financial product and being associated with a second client system (see at least Col. 3, line 65-Col. 6, line 65 for description of the art related to forming a first stored value program and its corresponding financial product; Col. 4, lines 39-5Col. 11, lines 11-48; Col. 12, lines 21-49 describing linking of various customer accounts and financial products); and

(c) accessing a *database* comprising consumer information and merchant information by said first and second client systems such that said first and second stored value programs interact with said *database* via said first and second pluralities of objects, respectively, to implement said first and second financial products on said first and second client systems, respectively (see at least Col. 7, lines 13-33; Col. 10, lines 41-56; see also utilization of common reports and customer demographic information available from stored objects that are created by any client system, Col. 10, lines 66-Col. 11, line 34).

Schein discloses receiving a transaction request from a point of sale terminal, said transaction request corresponding to one of said financial products (see at least Col. 10, lines 41-56, Col. 15, lines 41-52; Col. 20, line 51-Col. 22, line 3).

Schein discloses determining a financial product corresponding to a transaction request at a transaction server, and further comprising a step of processing a

transaction request in accordance with a first (or *nth*) plurality of data items if a transaction request corresponds to a first financial product (or nth). See at least, Col. 10, lines 41-Col. 12, line 49, describing the types of information available from the database. The information on the database is available for each transaction, and the transaction request is linked to a customer's products. A customer may have many products, each product associated with an object. These data items may also be referred to as a first through nth product.

Schein discloses separating a first and second financial product based upon a key value where said key value corresponds to a business unit. (see at least, Col. 5, lines 5 -Col. 67; Col. 6, line 7-Col. 7, line 46; Col. 10, lines 41- Col. 11, line 10 describes Database Management Systems. Database systems rely on unique and non-unique keys to store and access information. A key may identify CITIBANK, see at least, or a key may identify the CMMA CITIBANK MONEY MANAGEMENT ACCOUNT, as a separate business unit, if desired).

In summary, Schein discusses all limitations of applicants' invention, including stored value products such as smartcards and ATM cards. Client system computers may be connected to servers via the Internet (see at least Fig. 3, and Col. 15, line 53-Col. 16, line 7, Col. 21, lines 4-36; Col. 9, lines 57-Col. 10, line 7). Schein mentions several types of persistent repository mechanisms, including DB2, ORACLE (Col. 9, lines 1-67; see also application, page 17, lines 16-3). Schein discloses that other data models and structures may be applied (see at least Col. 6, lines 7-45, profiles and data models) and points out problems that arise when several sections in one or more clients

maintain application-specific data and programs (see at least Col. 6, lines 25-44). Classes and objects are another way of modeling & data in persistent storage.

Schein *does not* use the words class and objects. These words are found when one uses a data model called the "object-oriented" model. Owens discloses the use of relational databases in an object-oriented design in a multi-product on-line and Internet environment (see at least Abstract, Col. 1, lines 1-Col. 2, line 60, Col. 5, lines 36-Col. 7, line 30). Owens discloses a system for administering a plurality of financial resources in an object-oriented paradigm where persistent storage takes place in relational database management scheme (see at least references to SQL, the Structured Query Language that is used to access relational databases, Col. 1, lines 19-60).

Owens describes systems and methods for a system architecture that includes relational database information may be implemented in an object-oriented paradigm (see at least Co. 5, line 35-Col. 6, line 10).

Therefore, it would have been obvious to one of *ordinary* skill in the art of electronic-commerce to combine Schein and Owens to apply an object-oriented paradigm and describe plurality of financial products in terms of plurality of classes and plurality of objects.

One of *ordinary* skill in the art of electronic-commerce would have been motivated to combine Schein and Owens to apply an object-oriented paradigm and describe plurality of financial products in terms of plurality of classes and plurality of objects for the obvious reason that the use of objects and classes to describe data allows a clearer view of how data interacts with business applications. Applying object-

oriented terms permits one of *ordinary* skill in the art to reuse program code (classes) by instantiating a class into one or more objects that correspond to data items retrieved and used by different sub-systems.

The information on the centralized database is available to each of the client system databases for each transaction, and the transaction request is linked to a customer's products. In an object-oriented world, a customer may create (open/add/insert or other term) one or more financial product, including stored value products, and each product may be associated with an object. This plurality of *objects* may also be referred to as a first, second, through nth product, just as the plurality of client systems may be referred to as a first client system, a second client system, etc.).

While both Schein and Owens disclose the use of databases and key fields to partition and organize databases, neither Schein nor Owens specifically refer to "key object classes" and "secondary object classes." However, it was well known, at the time the invention was made, to partition databases and include key (index) fields to organize data.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include keys/indexes, key object classes and secondary object classes. One of ordinary skill in the art at the time the invention was made would have been motivated to include keys/indexes, key object classes and secondary object classes because having references to data (such as keys, indexes, key object classes and secondary object classes) permits faster access of data and cuts down on wait time for customers. By cutting down search and access time, service providers may well

retain customers, since customers usually do not enjoy waiting. When customers are forced to wait, customers may decide not to continue patronizing financial service providers, and may take their business elsewhere. One might also provide for the use of Key object classes, for example, when a search has all the key fields, possibly down several levels in a hierarchy. This type of OO design also permits rapid access to data and may assist in retaining customers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Zurita whose telephone number is 703-605-4966. The examiner can normally be reached on 8:30 am to 5:00 pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

James Zurita
Patent Examiner
Art Unit 3625
August 11, 2003

JZ

Jeffrey A. Smith
Primary Examiner